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## Two New Oedogonia from the Philippines

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From collections of freshwater algae made in Leyte Province of the Philippine Islands during 1944 and 1945, Britton (1948) reported four species and one variety of *Oedogonium* previously undescribed. In samples of these collections, referred to the writer, occur two additional new species of *Oedogonium*.

Oedogonium discretum **sp. nov.** Dioecious, macrandrous; oogonia 1-4, globose or pyriform or oboviform-globose, with a superior (rarely supreme) pore; oospore globose, almost completely filling oogonium: outer and inner wall smooth, middle wall scrobiculate; antheridia 1-4; sperms 2, with horizontal division; basal cell elongate; vegetative cell (12-) 16-23 by (39-) 50-89,u; oogonium 43-49 by 43-59 $\mu$ ; oospore 40-46 by 40-50 $\mu$ ,; antheridium 13-14 by 6-7,u.

Dioicum, macrandrium; oogoniis globosis vel pyriformibus vel oboviformiglobosis, singulis vel 2-4 continuis, poro superiore (rarius supremo) apertis; oosporis globosis, oogonia fere complentibus, membrana triplici: episporio laevi, mesosporio scrobiculato, endosporio laevi; antheridiis ad 4-continuis; gametis masculis binis, divisione horizontali ortis; cellula basali forma, ut vulgo, elongata; cellulis vegetativis (12-) 16-23. Iatis, (39-) 50-89<sub>u</sub> longis; oogoniis 43-49,u latis, 43-59,u longis; oosporis 40-46,u,latis, 40-50p, longis; antheridiis 13-14p, latis, 6-7μ, longis.

This species resembles *Oe. figuratum* Tiffany, but differs in cell dimensions and in the size of the pits of the middle spore-wall. It was collected in a shallow pool in a pasture near San Joaquin on October 7, 1945. Type specimens in Britton's Pacific Collection, no. 127 and 128. *Pl. 1, fig. 5-8*.

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Oedogonium pudicum **sp. nay.** Monoecious; oogonium 1, oboviform-globose or nearly globose, opening with superior or nearly supreme operculum; oospore globose, filling oogonium or nearly so, with smooth, thick spore-wall; antheridia 1-3, subepigynous; sperms 2, division horizontal; basal cell elongate; vegetative cell capitellate, 10-16 by 24-64<sub>u</sub>; oogonium 32-40 by 33-50u,; oospore 29-35 by 29-35<sub>u</sub>; antheridium 10-11 by 6-7μ,.

Monoicum; oogoniis oboviformi-globosis vel fere globosis, singulis, operculo apertis, circumscissione superiore vel fere suprema; oosporis globosis, oogonia complentibus vel fere complentibus, membrana crassa, laevi; antheridiis subepigynis, gametis masculis binis, divisione horizontali ortis, 1-3 continuis; cellula basali forma, ut vulgo, elongata; cellulis vegetativis capitellatis, 10-16,u, latis, 24-64μ longis; oogoniis 32-40μ, latis, 33-50u, longis; oosporis 29-35μ, latis, 29-35μ longis; antheridiis 10-11μ, latis, 6-7μ longis.

This species is intermediate in size and in general appearance between *Oe. ouchitanum* Taft and *Oe. bohemicum* Hirn. It was collected on roots and rhizomes of grasses in a ditch and in shallow water of pastured swamps one mile west of Palo on September 27, 1945. Type specimens in Britton's Pacific Collections, no. 127 and 128. *Pl. 1, fig.* 9, 10.

Oedogonium circumlineatum Britton was collected near San Joaquin on October 7, 1945, with oospores having as few longitudinal costae as 30. Britton (1948) gives the range in number of costae as 40-50. Pl. 1, fig. 1-4.

#### REFERENCES

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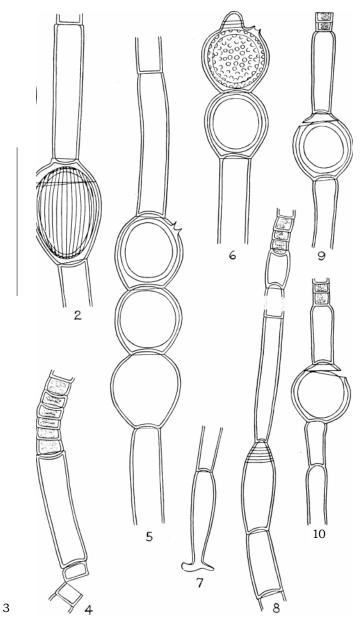
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 $\label{eq:continuous} Plate \ 1. \qquad Fig. \ 1-4. \ \textit{Oedogonium circumlineatum Britton.} \ Fig. \ 5-8. \ \textit{Oedogonium discretum sp. nov.} \ Fig. \ 9-10. \ \textit{Oedogonium pudicum sp. nov.}$